

## **Knowledge Organiser**

## Geography

**GCSE Geography AQA** 

Geography

**YEAR 10 & 11** 

2023-2025

NAME:				

TUTOR GROUP: \_\_\_\_\_

		PAPER 1 PHYSICAL GEOGRAPHY: SECTION A - THE CHALLENGE OF NATURAL HAZZARD	os
1		Natural hazards associated with Earth's atmosphere, such as hurricanes, tornadoes, wind, snow, drought, lightning and rain	Atmospheric hazards
2		Natural hazards associated with Earth's geological processes, such as volcanoes, landslides, mudflows, avalanches and earthquakes	Geological hazards
3		The probability or chance that a natural hazard may take place	Hazard risk
4		When a natural event, or hazard, impacts on human activities	Natural disaster
5		A natural event that poses a threat to humans and/or property	Natural hazard
6		Initial impact of a natural event on people and property, caused directly by it, i.e. The buildings collapsing following an earthquake	Primary effects
7	atural Hazards	After-effects that occur as indirect impacts of a natural event, sometimes on a longer timescale, i.e. Fires due to ruptured gas mains, resulting from the ground shaking	Secondary effects
8	al H	Reaction of people as the disaster happens and in the immediate aftermath	Immediate responses
9	Natur	Later reactions that occur in the weeks, months and years after the event	Long-term responses
10	_	Techniques of controlling, responding to, or dealing with an event	Management strategies
11		Using historical evidence and monitoring, scientists can make predictions about when and where a hazard may happen	Prediction
12		Actions taken to enable communities to respond to, and recover from, natural disasters	Disaster planning
13		Actions taken before a hazard strikes to reduce its impact, such as educating people or improving building design	Protection
14		Satellites detect heat and changes to a volcano's shape, helps predict when an eruption might occur	Remote sensing
15		Recording physical changes, i.e. Detecting heat and shape changes of volcanoes using remote sensing, to help forecast when and where a natural hazard might strike	Monitoring
16		The low density, thick outer layer of Earth which forms our continents	Continental crust
17	nics	The dense, thin outer layer of Earth that lies underneath the ocean	Oceanic crust
18	Tectonics	The border between two tectonic plates	Plate margin
19	Plate T	Two plates sliding alongside each other, in the same or different directions	Conservative plate margin
20		Circular movement of heat within Earth which drive the movement of tectonic plates	Convection currents
21		A plate margin where wo continental plates collide, land is crushed and forms mountains	Destructive plate margin (Collision)
22		Tectonic plate margin where rising magma adds new material to plates that are diverging or moving apart	Constructive plate margin
23	S	Uplifted land that is crumpled by the collision of two plates is called what?	Fold mountains
24	tonic	The movement of rock, earth or debris down the slope of a hill?	Landslide
25	Plate Tectonics	The frequency and distribution of earthquakes in a certain area, recorded by seismographs is called?	Seismicity
26	Δ.	What term is used to describe a destructive margin, where the denser oceanic plate moves beneath the less dense continental plate?	Subduction
27		The way in which something is spread over an area is described as it's what?	Distribution
28		On what plate margin do we not find volcanic activity?	Conservative & Collision margins

29		On what plate margin would you find earthquakes	All types
30		Many earthquakes and volcanoes are found around the Pacific Ocean, what is this area known as?	Pacific ring of fire
31		Haiti is the poorest country in the Western Hemisphere, in Jan 2010 they experienced a devasting earthquake measuring on the Richter scale.	7.0 on the Richter scale
32		Port-au-Prince, the capital of Haiti, was home to over 2 million people when the quake hit. Why did 70% of the buildings across the city collapse?	Lack of building codes/ not earthquake resistant
33		In the Haiti earthquake, 1 million people were made homeless, and 3 million people were affected but how many people died?	316,000 people were killed (Primary/social)
34		It is estimated that 1 in 5 jobs were lost as a result of the quake. What type of effect is this?	Secondary (economic)
35	Earthquake	Broken electricity cables started fires which damaged woodland areas in Haiti. There were also many landslides that occurred that destroyed natural landscapes, habitats, and block access to some rural areas.	Secondary Environmental effects
26	Haiti Ea	Cash for work' programs involved paying Haitians to clear the rubble left by the earthquake. What type of response was this?	Long term response
37		The government of Haiti estimated that over 250,000 residences and 30,000 commercial buildings had been destroyed or severely damaged this also included 4000 schools and 8 hospitals,	Primary (economic & social)
38		The large number of bodies meant that diseases, especially cholera, became a serious problem and spread through	Secondary (social)
39		The port, major roads and communications link were damaged beyond repair and needed replacing. What type of effect is this?	Primary, (economic)
40		Many countries responded to appeals for aid, pledging funds and dispatching rescue and medical teams, engineers and support personnel. What type of response is this?	Short term/ Immediate response
41		2,000 people were injured in the earthquake that hit Christchurch in Feb 2011 but how many people died?	181 people were killed (primary effect)
42		Christchurch could no longer host Rugby World Cup matches so lost the benefits, e.g. tourism and income, they would bring. What type of effect is this?	Secondary /economic
43		80% of the water and sewerage system was severely damaged and took several months to repair	Secondary /social
44	2011	The Farmy Army was made up of 800 farmers who brought their farm machines and muscle to help clean up the city. What type of response is this?	Short term response
45	Earthquake	By which month were roads and houses cleared of silt from liquefaction and 80% of roads & 50% of footpaths repaired?	August 2011/ long term response
46	hurch Eart	Christchurch sits on a transform boundary. on Tuesday, 22 February 2011 at 12:51 pm Christchurch was hit by a large earthquake that lasted 10 seconds but how big was this earthquake?	6.3 on the Richter scale
47	Christchurch	Damage to roads made it difficult for people and emergency services to move around. But what caused the damage to roads?	Liquefaction
48		One response was to set up chemical toilets were provided for 30,000 residents. What type of response is this?	Short term
49		Up to 100,000 buildings were damaged and about 10,000 buildings needed to be demolished. What type of effect is this?	Primary
50		Urban search and rescue where on slight quickly and police from Australia were flown in to help. What type of response is this?	Short term/ immediate response

51		Extreme weather events that pose a threat to humans and/or property.	Weather hazard
52	rds	A highly complex mass of gases, liquids and solids that envelopes the Earth	Atmosphere
53	Weather Hazards	Circular movement of air within Earth's atmosphere	Atmospheric circulation
54	Weath	Section of Earth's atmosphere where air moves in circular motions, together these form the overall circulation of Earth's atmosphere	Atmospheric Cells
55		When a weather event is significantly different from the average or usual weather pattern, and is especially severe or unseasonal	Extreme weather
56		Areas of low atmospheric pressure bring wind and rain	Depressions
57		The spinning effect caused by the rotation of the Earth	Coriolis effect
58		Easterly winds that blow towards the Equator	Trade winds
59		An area of low pressure with winds moving in a spiral around a calm central point called the eye of the storm – winds are powerful and rainfall is heavy	Tropical storm
60		A small area at the centre of a storm where relatively cold air descends rapidly	Eye (of the storm)
61		The outer edge of the eye of a storm where the most intense weather conditions occur	Eye wall
62	Hazards	The term given to a tropical storm in south-east Asia and Australia	Cyclone
63	Haza	Scale used to measure the strength of hurricanes based on wind speed	Saffir-Simpson Scale
64	Weather	A wall of water often 3-5 metres high, driven onshore by a tropical storm. The most destructive hazard associated with tropical storms	Storm surge
65	\$	Movement of people away from danger to a place of safety	Evacuation
66		The predicted likelihood and frequency of floods in an area	Flood risk
67		Accommodation for people who have been evacuated from areas threatened by cyclones (tropical storms), often built from strong concrete and on stilts to prevent flooding	Cyclone shelter
68		Money, goods and services given by single governments or an organisation like the World Bank or IMF to help the quality of life and economy of another country	Aid
69		A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature	Climate change
70		Typhoon Haiyan was described as a category 5 super typhoon with wind speeds up to?	170 miles per hour
71	yan	6 million people lost their source of income and looting and violence broke out in the city of Tacloban. What type of effects are these?	Secondary (economic)
72	Typhoon Haiyan	The 5m storm surge was responsible for most of the deaths across the Philippines but how many people died in total?	6300 (primary/social)
73	yphc	Tacloban airport was badly damaged. How many fishing boats did the typhoon destroy?	30,000
74		Shortages of water, food and shelter lead the outbreak of diseases. What type of effect is this?	Secondary (social)
75		Strong winds damaged crops and powerlines, what type of effect is this?	Primary (economic)
76	ıiyan	Heavy rain caused landslides blocking access to remote areas. What type of effect is this and how much rain fell?	Secondary, 400mm (Environmental & social )
77	Typhoon Haiyan	Saltwater contamination from the storm surge damaged soil and ecosystems and made farming difficult following the typhoon. What type of effects are these?	Secondary (environmental & economic)
78	<u> </u>	Aid agencies such as Oxfam supported the replacement of fishing boats vital for income. What type of response is this?	Long term response

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79	<del>)</del>		The UK sent shelter kits and 1200 evacuation centres were set up to help the homeless. What type of response is this?	Short term / Immediate response
80			Rivers had not been dredged for 20yrs, it was the wettest January since records began with 350mm falling across Jan &Feb, 100mm above average and storm surges combined with high tides meant the water couldn't escape into the sea. What do all of these facts have in common?	They are all causes of the floods
8			Residents were evacuated for several months, how many houses were flooded? and what type of effects are these?	Over 600, Primary , Social
82	_	14	Some villages such as Moorland were completely cut off by the flood water, affecting peoples daily lives. What type of effect is this?	Social
83		00d 201	16 farms and 1000 livestock had to be evacuated due to 14,000 ha of agricultural land being under water	Economic
84	1   \( \text{\frac{\pi}{2}} \)	Š	Cost of flood damage was estimated to be more than how many million?	£10 million, economic effect
8.	sot I eve	set Level,	Floodwaters were heavily contaminated with sewage and other pollutants including oil and chemicals, what type of effect is this?	Environmental effect
80	1 2	somer	8km of two major rivers were dredged following the flooding to increase the capacity of the rivers. What were the two rivers called?	River Tone & River Parrat
8	7		What was raised in places to maintain communications and enable businesses to continue in the event of a future flood? And what type of response is this?	Roads, long term response
88	3		Villagers cut off by the floods used boats to go shopping and attend school. What type of response is this?	Short term / immediate response
89	ð		As well as dredging some riverbanks were raised and strengthened. What type of river management is this?	Hard engineering.
90	)		Actions taken to adjust to natural events such as climate change, to reduce damage, limit the impacts, take advantage of opportunities, or cope with the consequences	Adaptation
9			Sources of energy that are not produced from the burning of fossil fuels, such as hydro- electricity, nuclear power and solar power	Alternative energy
92	2		A highly complex mass of gases, liquids and solids that envelopes the Earth	Atmosphere
9:	3		The angle of Earth's axis	Axial tilt
9,	1 0000	change	Technology that captures CO <sub>2</sub> produced from the burning of fossil fuels, which is compressed, transported and then injected underground into suitable geological reservoirs	Carbon capture and storage (CCS)
9!	ا م	te cr	The removal of CO <sub>2</sub> from the atmosphere	Carbon sinks
91	Clima	Climate	A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature	Climate change
9	7		The path of the Earth as it orbits the Sun	Eccentricity
98	3		The increased effectiveness of the greenhouse effect, believed to be the cause of recent global warming	Enhanced greenhouse effect
99	9		A natural fuel such as coal or gas, formed in the geological past from the remains of living organisms	Fossil fuel
10	0		The increase of global temperatures	Global warming
10	1	cnange	The blanketing effect of the atmosphere in retaining heat given off from the Earth's surface	Greenhouse effect
10	2	ate c	Atmospheric gases such as carbon dioxide and methane that can absorb heat	Greenhouse gases
10	3	Climate	Columns of ice that are extracted from ice sheets and used to reconstruct temperature patterns from the past 400,000 years	Ice cores

104	Three distinct cycles of Earth's orbit around the Sun (Eccentricity, Precession, Axial tilt) which scientists believe affect the timings and seasons of Earth's climate	Milankovitch cycles
105	Action taken to reduce the long-term risk from natural hazards, such as earthquake-proof buildings or international agreements to reduce greenhouse gas emissions	Mitigation
106	The natural 'wobble' of Earth's axis as it orbits around the Sun	Precession
107	A resource that cannot be exhausted, i.e. Wind, solar and tidal energy	Renewable energy
108	Large explosions on the surface of the Sun	Solar flare
109	A dark patch that occasionally appears on the surface of the Sun	Sunspots
110	When volcanoes blast ash, gases and liquids onto the Earth's surface and atmosphere	Volcanic eruption

	PAPER 1 PHYSICAL GEOGRAPHY: SECTION B - THE LIVING WORLD				
1		Components in an ecosystem that are non-living environmental factors such as climate (temperature and rainfall), soil, water temperature and light	Abiotic		
2		Global-scale ecosystems such as a tropical rainforest or deciduous woodland	Biome		
3		Components in an ecosystem that are living such as plants and fish	Biotic		
4		An individual part or element of a wider system	Component		
5		Organism that eats herbivores and/or plant matter	Consumer		
6		Organisms such as bacteria or fungi that break down plant and animal material	Decomposer		
7		A community of plants and animals that interact with each other and their physical environment	Ecosystem		
8	ems	Connections between different organisms (plants and animals) that rely upon one another as their source of food	Food chain		
9	Ecosystems	A complex hierarchy of plants and animals relying on each other for food	Food web		
10	E	An organism or plant that is able to absorb energy from the sun through photosynthesis	Producer		
11		The variety of life in the world or a particular ecosystem	Biodiversity		
12		The on-going recycling of nutrients between living organisms and their environment	Nutrient cycle		
13		Give a reason for reduction in biomass as you move up the tropic levels	Not all parts of animals are eaten, some is lost through movement/growth Some is excreted		
14		When plants and animals evolve characteristics that help them to survive in their local climate/ environment	Adaptation		
15		Lines that run parallel to Earth's Equator, measured in degrees	Lines of latitude		
16		The line of latitude that divides Earth's surface into a northern and southern hemisphere	Equator		
17		Global-scale ecosystem mainly found close to the Equator, characterised by high temperatures approx. 30°c, high rainfall approx. 2000mm and huge biodiversity	Tropical rainforest		
18		What name to we give the tallest trees that piece through the main canopy growing 40-50m tall?	Emergent Trees		

19		The continuous layer of branches in a forest, which blocks out the light below and hosts the majority of plant and animal species	Canopy
20	est	How have leaves adapted to shed the daily heavy rainfall?	Drip tip leaves
21	rainforest	The rainforest is able to remove CO <sub>2</sub> from the atmosphere through the processes of photosynthesis and put it into long term storage. What does this make the rainforest?	Carbon sink
22	Tropical	Soil which is unable to reproduce or sustain life. Rainforests store most nutrients in their leaves so their soils are often described as this.	Infertile soil
23	of the	The hot wet climate is ideal for rapid decomposition. How long does it take a leaf in the rainforest to decompose?	6 weeks
24	Features	Which layer is the darkest, here plants are sparse and those that live here have dark green leaves and are adapted to photosynthesising in low levels of light	Forest floor
25	4	Native to a particular place, usually living in harmony with the natural environment, using resources without causing long-term harm	Indigenous tribes
26		The cutting down and removal of forest	Deforestation
27		The removal of resources from the earth, a cause of deforestation	Mineral extraction
28		The type of wood provided by tropical rainforests trees	Hardwood
29		Palm oil is the most widely-used vegetable oil in the world. Palm oil is squeezed from the fruits of the oil palm tree.	Palm Oil
30		Commercial farming of beef, one of the main causes of deforestation in the Amazon	Cattle ranching
31	station	The Bakun Dam's reservoir flooded an 700km2 area of rainforest but is used to generate electricity as well as provide jobs and food. What is this type of energy called?	HEP, Hydroelectric power
32	fores	When people are removed from one place and moved to another	Transmigration
33	Causes of deforestation	A method of land clearing that involves the use of fire, which creates valuable nutrients to help plants grow, but can grow out of control and destroy large areas of forest	Slash and burn
34	Caus	Where all the trees are cut down in an area, leading to the total destruction of the forest.	Clear felling
35		A type of agriculture which usually involves farming on a large scale, using few workers but lots of machinery and technology with the aim of making a large profit. Crops are not used locally.	Commercial farming
36		A large farm in the tropics where one main cash crop is grown e.g. Palm oil, rubber, coffee and often run by a transnational corporation.	Plantations
37		A type of agriculture producing only enough food and materials for the benefit of a farmer and their family	Subsistence farming
38	ts	Removal of topsoil faster than it can be replaced, due to natural (water and wind action), animal, and human activity	Soil erosion
39	infores	Actions taken before a hazard strikes to reduce its impact, such as educating people or improving building design	Protection
40	al Ra	Sustainable forestry management where only carefully selected trees are cut down	Selective logging
41	g Tropic	Countries are relieved of some of their debt in return for an agreement that they preserve and protect their natural environments	Debt reduction
42	Managing Tropical Rainforests	Actions that meet the needs of the present without reducing the ability of future generations to meet their needs	Sustainability
43	Σ	Promises made between countries and/or organisations to mitigate the destruction of natural habitats	International agreements

44		Managing the environment in order to preserve, protect or restore it	Conservation
45		Nature tourism usually involving small groups with minimal impact on the environment	Ecotourism
46		What resources are extracted from the Malaysian rainforests	Tin & smelting, oil & gas
47		When did Malaysia become the largest exporter of tropical woods?	1980
48		The Bakun Dam first started to generate electricity in 2011, what is the energy used for?	Industrialised Peninsular Malaysia
49	т	The Bakun Dam is 205m high. When it was built the reservoir flooded a large area of forest and farmland. How big was this area?	700km2
50	Thar Desert	In the past the government of Malaysia encouraged poor urban people to move to the countryside from the rapidly growing urban areas. 15000 hectares of rainforest was felled by the settlers, what is this called?	Transmigration
51		What method of deforestation involves using fire to burn areas of the forest to clear the land?	Slash and burn
52		Plantation owners receive 10-year tax incentives so increasing amounts of forest have been converted but what is grown?	Palm Oil
53		28% of the world's oxygen comes from the rainforest, they are also an important store of carbon and help control climate change. What is a long-term store of carbon called?	Carbon Sink
54		Why might the government want to cut down the rainforest?	Economic gain / development
55		An environment that is very dry, with little or no rainfall, usually less than 250mm per year. Also described as arid.	Desert
56		At what latitude would you find most deserts?	30 degrees north and south of the equator
57		Temperatures that present challenges for people, animals and plants living in in certain environments	Extreme temperatures
58		The process of water changing from liquid to vapour	Evaporation
59		Active during the night, an adaption strategy for mammals to cope with the intense heat such as the desert jerboa	Nocturnal
60	rt	Many plants in the desert are succulents and store water in there leaves, stems or roots. Give one example	Cactus.
61	ลr Desert	What do the humps of camel's store?	Fat due to lack of vegetation/food
62	Thar	An underground water source, where water is stored in permeable rocks. In the desert these can be accessed through deep wells	Aquifer
63		What adaptions has the Fennec fox developed in order to survive in the harsh desert environment?	Large ears to release heat, fur covered feet, pale fur to reflect the sun
64		Other than to store water how else have plants like cacti adapted to live in the desert?	Seeds stay dormant Small needle like leaves to reduce water loss long roots to reach groundwater stores
65		The Thar Desert stretches across Pakistan and what other country?	Northwest India
66		Growing demand has increased pressures on water supplies, what has caused this increase in demand.	Population growth Industrial growth
67		High pressure leads to cloudless skies and so temperatures peak in the day but fall rapidly at night. What temperatures could be expected in the summer?	50 degrees

68		Commercial farming of cotton and wheat in the Thar Desert has grown since the construction of the Ghandi Canal in 1958. What did this allow?	Irrigation
69		Thar Desert is rich in energy resources with extensive lignite coal deposits and a large oilfield. What renewable energy resources does the Thar Desert offer?	Jaisalmer Wind Park & Solar power
70		What tourist opportunities does the Thar Desert offer?	Winter Annual Desert Festival & Desert Safaris on camel
71		What mineral resources are extracted from the Thar Desert?	Feldspar, Gypsum, Phosphorite, Kaolin & Limestone
72		The extreme temperatures and strong winds create what challenges for transport across the region?	Melts tarmac, wind buries roads in sand
73		A natural drinking water source found in the Thar Desert, Pakistan	Tobas
74		Man-made drinking water source found in the Thar Desert, Pakistan	Johads
75	ıt	What two areas benefit for the from the Indrira Gandhi Canal?	Jodhpur and Jaisalmer 3500km2 land is irrigated
76	Desert	The process of land turning into desert as the quality of the soil declines over time	Desertification
77	Thar [	A cause of deforestation in the semi-arid areas that can contribute to desertification	Fuelwood
78	-	Where the intensive growing of crops exhausts the soil leaving it barren	Over-cultivation
79		Feeding too many livestock for too long on the land, so it is unable to recover its vegetation	Overgrazing
80		Addition of water to the land often to aid plant growth	Irrigation
81		When high rates of evaporation lead to a build-up of salts on the surface, often the result of over-irrigation in arid regions	Salinisation
82		The collection and storage of rainwater, rather than allowing it to run off.	Water harvesting
83		Removal of topsoil faster than it can be replaced, due to natural (water and wind action), animal, and human activity	Soil erosion
84		Technology suited to the needs, skills, knowledge and wealth of local people and their environment	Appropriate technology
85		Areas of land enclosed by low walls to store water	Ponding banks
86		Embankments of stones or earth built along the contours of slopes to prevent soil from being washed down during heavy rainfall, also helps to increase	Bunds/ Magic stones Contour traps

		PAPER 1 PHYSICAL GEOGRAPHY: SECTION C - PHYSICAL LANDSCAPES IN THE U	JK
1		Term used to describe the break down or dissolving of rocks and minerals in situ (without moving)	Weathering
2		A type of weathering caused by flora and fauna, such as plant roots growing in cracks in the rock or animals burrowing into weak rocks	Biological weathering
3		The decomposition (or rotting) of rock caused by a chemical change within that rock	Chemical weathering
4		Weathering of limestone and chalk by acidic rainwater	Carbonation
5		Physical disintegration or break up of exposed rock without any change in its chemical composition, i.e. Freeze-thaw	Mechanical weathering
6		A common process of weathering in a glacial environment involving repeated cycles of freezing and thawing that can make cracks in rock bigger	Freeze-thaw weathering
7	Processes	A weathering process where salt crystals grow and expand in the cracks and holes of rock, creating pressure which eventually causes fragments of rock to break away	Salt weathering
8		Accumulation of fragments of weathered rock	Scree
9	Geomorphic	Downhill movement of weathered material under the force of gravity	Mass movement
10	Geo	Slump of saturated soil and weak rock along a curved surface	Rotational slip
11		A fragment of rock breaks away from the cliff face, often due to freeze-thaw weathering	Rockfall
12		The movement of rock, earth or debris down the slope of a hill. Also known as a <i>landslip</i>	Landslide
13		Wearing away and removal of material by a moving force, such as a breaking wave	Erosion
14		(1) rocks carried along a river wearing down the river bed and banks (2) the sandpaper effect of sand and pebbles being thrown at cliffs	Abrasion
15		Rocks being carried by the river or sea smash together and break into smaller, smoother and rounder particles	Attrition
16		Process where breaking waves compress pockets of air in cracks in a cliff or riverbank; the pressure may cause the crack to widen, breaking off rock	Hydraulic Action/ power
17		Chemical erosion caused by the dissolving of rocks and minerals by sea water	Corrosion
18		The movement of eroded material	Transportation
19	Processes	Hopping or bouncing movement of small pebbles along a river or seabed	Saltation
20		Heavy particles rolled along the sea bed	Traction
21	omorphic	Small particles carried in river flow or sea water, i.e. Sands, silts and clays	Suspension
22	Geo	The dissolving of rocks such as limestone and chalk by sea water	Solution
23		Occurs when material being transported by the sea is dropped due to the sea or river losing energy	Deposition
24		The way that layers of rock are layered along the coast	Geological structure
25		A straight coastline with a single rock running parallel to the coast	Concordant coastline
26		An indented coastline made up of headlands and bays forms when different rocks types are perpendicular to the coast	Discordant coastline

27		Rocks that erode very slowly, such as granite, can be described as what?	Resistant rocks
28		A crack or line of weakness in rock	Joint/ Fault
29		The distance of open water over which the wind can blow	Fetch
30	Ñ	Ripples in the sea caused by the transfer of energy from the wind blowing over the surface of the sea	Waves
31	andscapes	Water that flows back towards the sea after the swash has moved up-shore	Backwash
32	ands	The forward movement of a wave up a beach	Swash
33	stall	A wave with a low wave height but strong swash that surges up a beach depositing material	Constructive waves
34	Coa	A wave with tall wave height and high frequency with a powerful backwash that moves material eroding the beach	Destructive Waves
35		Wave energy is reduced in bays as the water gets shallower	Wave refraction
36		Transport of sediment along a stretch of coastline caused by waves approaching the beach at an angle	Longshore drift
37		A physical feature of the Earth's surface	Landform
38		A steep high rock face formed by weathering and erosion	Cliff
39		Rocky, level shelf at or around sea level representing the base of old, retreated cliffs	Wave-cut platform
40		A rocky coastal promontory (highpoint of land) made of rock that is resistant to erosion: headlands lie between bays of less resistant rock where the land has been eroded by the sea	Headland
41		A wide coastal inlet, often with a beach, where areas of less resistant rock have been eroded by the sea	Bay
42		A large hole in a cliff caused by waves forcing their way into cracks in the cliff face	Cave
43		A wave-eroded passage through a small headland. This begins as a cave which is gradually widened and deepened until it cuts through	Arch
44	orms	Isolated pillar of rock left when the top of an arch has collapsed	Stack
45	ıl Landform	A zone of deposited material that extends from the low water line to the limit of storm waves	Beach
46	Coastal	A low ridge on a sandy beach created by swash, usually marks the high tide line	Berm
47	ŭ	Depositional landform formed when a finger of sediment extends from the shore out to sea, often at a river mouth	Spit
48		Areas of fine sediment deposits which over time can develop in saltmarshes	Mudflats
49		Important natural habitats often found in sheltered river estuaries behind spits where there is very little flow of water	Saltmarshes
50		Where a spit grows across a bay, a bar can eventually enclose the bay to create a lagoon	Bar
51		A sandbar or spit that connects an island to the mainland.	Tombolo
52		Deposit of sand which has been blown inland by onshore winds and has built up over time	Dune
53		Coastal landform that runs parallel to the coastline, often created when offshore bars are driven onshore by rising sea levels	Barrier beach
54	Coastal	Strategies used to defend coastal environments, divided into three different approaches: hard engineering, soft engineering and managed retreat	Coastal management
55	Ö	When coastal defences are built or maintained to protect a coastline against the impacts of sea level rise and coastal erosion/flooding.	Hold the line

56		Highly visible man-made structures used to protect coasts by absorbing the energy of waves, preventing erosion and flooding or to stop or disrupt natural processes.	Hard engineering
57		Concrete wall aiming to prevent erosion of the coast by reflecting wave energy	Sea wall
58		A wooden barrier built out into the sea to stop the longshore drift of sand and shingle, and allow the beach to grow	Groyne
59		Large boulders deliberately dumped on a beach as part of coastal defences	Rock armour
60		Steel wire mesh filled with boulders used in coastal defences	Gabions
61	٦t	Management strategies that work with natural processes and are usually more sustainable	Soft engineering
62	Management	Adding new material to a beach artificially, through the dumping of large amounts of sand or shingle	Beach nourishment
63		Fences constructed on sandy beaches to encourage the formation of new sand dunes to protect existing dunes	Dune fencing
67	Coastal	Building up dunes and increasing vegetation to prevent excessive coastal retreat	Dune regeneration
68		Type of grass that is adapted to windy, exposed conditions and is used in coastal management to stabilise sand dunes	Marram grass
69		The establishment of a new coastline as part of managed retreat, often allowing flooding to occur over low-lying land to protect farmland, roads and settlements	Coastal realignment
70		Increasing the height and width of beaches by dumping and shaping of dredged sand or shingle, helps to absorb more wave energy	Beach Reprofiling
71		Where is the Swanage coastline located in the UK?	South coast, Dorset
72		The coast at Swanage can be described as discordant or concordant?	Discordant
73		Swanage bay formed on a band of soft clays and sands, The headland to the south, Pevril point, is formed from limestone, what rock types is the headland to the north?	Chalk
74	Je	The sand dune system located to the north of Old Harry's rocks is called what?	Studland dunes
75	Coastline	What is the name of the famous chalk headland with cave arch stack and stump landforms?	The Foreland Old Harry's rocks
76	age	What is the name of the spit to the north of Swanage that has grown across Poole Harbour?	Sand Bank spit
77	Swar	The Beach at Swanage had narrowed by 20m and if defences were not improved they estimated £10.7m of damage to the town over the next 50 years. When were the new defences completed and at what cost?	completed in June 2006 at an estimated cost of £2.2 million.
78		Swanage bay is now protected by a sea wall and how many wooden groynes?	18 groynes
79		Groynes are expensive but effective at stopping what coastal process?	Longshore drift
80		90,000 m3 of beach nourishment is also used to protect the town. This sand is then moved by the sea via longshore drift. How many tonnes are needed to top this up and how often?	40,000m3 of sand every 20 years.
81		An area of land drained by a river and its tributaries	Drainage basin
82	Ş	The height and angle of a slope	Gradient
83	Features	Steep-sided valley	V-shaped valley
84	n Fea	Outcrops of land along the river course in a valley	Interlocking spurs
85	Basi	Downward erosion of the river bed	Vertical erosion
86	River	A cross section of a river channel or its valley	Cross profile
87	ız	The start of a river	Source
88		A small stream that joins a larger river	Tributary

89		Where a tributary joins a larger river	Confluence
90		The end of a river, usually where a river joins the sea	Mouth
91		The edge of the river basin	Watershed
92		The path of the river from its source to mouth	Course
93		The main water course	Channel
94		Rate of the river flow	Velocity
95		Quantity of water that passes a given point on a stream or riverbank within a given period of time	Discharge
96		Rocks being carried by the river smash together and break into smaller, smoother and rounder particles	Attrition
97		A sediment deposited by a river when it floods	Alluvium
98		Occurs when material being transported by the sea is dropped due to the sea losing energy	Deposition
99		Material transported by a river	Load
100		The gradient of a river, from its source to its mouth	Long profile
101	S	A step or drop in a river's bed which often cause waterfalls	Knick point
102	Landforms	A step in the long profile of a river usually formed when a river crosses over a hard (resistant) band of rock	Waterfall
103	River Laı	A deep and turbulent area of water where the river 'plunges' over a waterfall. Abrasion makes this deeper over time	Plunge pool
104	æ	A narrow steep-sided valley – often formed as a waterfall retreats upstream	Gorge
105		Alternating sequence in the course of a river or stream that carry coarse sediment, where shallow fast-flowing sections are called <i>riffles</i> and deeper slower-moving sections are called <i>pools</i>	Pools and riffles
106		Erosion of riverbanks rather than the bed – helps to form the floodplain	Lateral erosion
107		A wide bend in a river	Meander
108	sm.	The course of the fastest flow (velocity) within a river	Thalweg
109	Landforms	A river cliff can be found on the outside of a meander but what landform can be found on the inside of a meander where the flow is slowest?	Slip off slope
110	River	An arc-shaped lake on a floodplain formed by a cut-off meander	Ox-bow lake
111	R	Raised bank found on either side of a river, formed naturally by regular flooding or built up by people to protect the area against flooding	Levee
112		Relatively flat area forming the valley floor either side of a river channel that is sometimes flooded	Floodplain
113		Tidal mouth of a river where it meets the sea – wide banks of deposited mud are exposed at low tide	Estuary
114		Moisture falling from the atmosphere – rain, sleet or snow	Precipitation
115	<b>b</b> 0	Where river discharge exceeds river channel capacity and water spills onto the floodplain	Flood
116	Flooding	A very sudden flood event resulting from a torrential rainstorm	Flash flood
117		The likelihood of a flood event occurring in a certain area	Flood risk
118	River	A graph which shows the discharge of a river, related to rainfall, over a period of time	Hydrograph
119		The time in hours between the highest rainfall and the highest (peak) discharge	Lag time
120		A surface (manmade or natural) that does not allow water to pass through it	Impermeable surfaces

121		A surface that does allow water to pass through it	Permeable
122		The growth of cities leading to increased impermeable surfaces and drain networks that speed water to nearby streams and rivers	Urbanisation
123		The cutting down and removal of forest reducing interception.	Deforestation
124		When water to sinks from the surface into the soil below	Infiltration
125		Financial savings made by preventing flooding, along with any environmental improvements	Benefits
126		The financial cost of a scheme, and any negative impacts on the environment and on people's lives	Costs
127		Involves the construction of artificial structures to alter natural processes, prevent or control flooding.	Hard engineering
128		Artificially raised river banks often using concrete walls	Embankment
129		A barrier built across a valley to interrupt river flow	Dam
130		A large natural or artificial lake used as a source of water supply	Reservoir
131	ent	Removing meanders from a river to make it straighter	Channel straightening
132	eme	Involves working with natural processes to manage flood risk	Soft engineering
133	anag	Providing reliable advance information about possible flooding	Flood warnings
134	≥	Modifying the course of a river to return it to its natural state	River restoration
135	Flood	Identifying flood risk across a floodplain and planning the land use in this area carefully to reduce risk	Floodplain/ land use zoning
136		Saturated areas of land, often found on river floodplains	Wetlands
137		Is the establishment of a forest or addition of trees in an area where there was no previous tree cover, increases interception and reduces runoff.	Afforestation
		Water is deliberately allowed to flood wetlands to reduce the risk of flooding further downstream	Flood storage areas
138		When we clear the riverbed of mud, weeds, and rubbish to increase the capacity of the river and allow a smoother flow	Dredging
139		How many kilometres of the River Tone and River Parrat were dredged following the 2014 flooding to increase the capacity of the rivers.	8km
140	evels	What was raised in places to maintain communications and enable businesses to continue in the event of a future flood?	Roads
141	merset L	Villagers cut off by the floods used boats to go shopping and attend school. What type of response is this?	Short term / immediate response
142	ent So	As well as dredging some riverbanks were raised and strengthened. What type of river management is this?	Hard engineering.
143	anagem	A 20year Flood action plan was formulated to reduce future flood risk. What was the estimated cost of this?	£20million
144	Σ	How many pumps were used to drain 65 million m3 of floodwater.	65 pumps
145		One cause of the flooding was the coastal storm surge that blocked river flow causing water to back up. What are they considering building in the future to manage this risk?	A tidal barrage

Harmful emissions, or other substances, that enter earth's atmosphere  A squatter settlement or slum in a Brazilian city  The type of employment where people receive a regular wage, pay tax, and have certain rights such as paid holidays and sick leave  Formal econ	
The type of employment where people receive a regular wage, pay tax, and have certain rights such as paid holidays and sick leave  Formal econ	n
certain rights such as paid holidays and sick leave  Formal econ	
	omy
4 Urban area with an important role in the global economy Global cit	У
Differences between people, in terms of factors such as; poverty, wealth, wellbeing, employment opportunities, housing, education etc.	es
Employment outside the official knowledge of the government, takes place in small, unregistered enterprises and doesn't involve paying taxes.	iomy
Government regulated, and workers are insured a wage and certain rights. Formal econ	omy
8 When people move from one area to another Migration	1
Birth rate minus the death rate of a population  The presence of chemicals, noise, dirt or other substances which have harmful or poisonous effects on an environment  The attractions and opportunities of a place that encourage people to move there  The negative aspects of a place that encourage people to move away  Push factor	ease
The presence of chemicals, noise, dirt or other substances which have harmful or poisonous effects on an environment  Pollution	
The attractions and opportunities of a place that encourage people to move there  Pull factor	S
The negative aspects of a place that encourage people to move away  Push factor	rs
How good a person's life is, measured by such things of housing and environment, access to education, healthcare, how secure people feel and how happy they are with their lifestyle  Quality of I	ife
When people move from the rural countryside to urban areas (cities)  Rural-urban mi	gration
Things designed to protect public health, such as providing clean water and disposing of sewage and waste  Sanitation	١
An area of (often illegal) poor-quality housing, lacking in services like water supply, sewerage and electricity  Squatter settle	ment
When there is too great a volume of traffic for roads to cope with, and traffic slows to a crawl  Traffic conge	stion
The increase in the area covered by cities  Urban grov	<b>r</b> th
When an increasing percentage of a country's population live in towns and cities  Urbanisation	on
An urban area with a total population of more than ten million people Megacitie	s
An arban area with a total population of more than ten million people	World Cup
Rio has hosted a number of important international events such as? 2016 Olympics, 2014	
Rio has hosted a number of important international events such as?  Rio is home to which of the 7 Wonders of the World? People travel from all over Brazil and the world to visit this wonder.  Christ the Redo	eemer
Rio has hosted a number of important international events such as?  Rio is home to which of the 7 Wonders of the World? People travel from all over Brazil and the world to visit this wonder.  Christ the Rede Major port exporting sugar, Cultural capit produces 5% Brazil.	ng coffee & al of Brazil,
Rio has hosted a number of important international events such as?  Rio is home to which of the 7 Wonders of the World? People travel from all over Brazil and the world to visit this wonder.  Christ the Rede	ng coffee & al of Brazil, azil GDP oking for es, Portugal -

26	growth in	One social challenge was that in 2013 only 55% of the city had a local family health clinic, health service for pregnant women and the elder were very poor. What was done to improve things?	Introduced health kits able to identify 20 different diseases and treat them reducing infant mortality					
27	ities of g	Education is only compulsory up to the age of 14, only half continue education beyond this. What has been done to improve this?	Grants for poor family's private university in Rocinha					
28	opportuni o	One social challenge is that around 12% of Rio's population did not have access to running water. The 2016 Olympics prompted what improvements?	7 new treatments plants 300km of new pipes were laid. By 2014 95% had mains supply					
29	Case study –Challenges and opportunities of growth in Rio	Access to energy is limited in favelas, many of the poor tap into the mains supply illegally which is very dangerous. What has been done to improve electricity supplies?	60km of new powerlines installed, new nuclear generator & new hydro-electric complex increasing Rio's supply by 30%					
30	tudy –C	Unemployment rates are highest in the favelas at 20% most people work as street vendors, drivers, cleaners, all part of what?	The informal economy					
31	Case s	Traffic congestion is a real problem in Rio. The number of cars has increased by 40%, high crime discourages the use of public transport, and the mountains make building roads difficult. What type of challenge does traffic congestion cause Rio?	Environmental / air pollution					
32	udy –Challenges and opportunities of growth in Rio	How did Rio try to address the high crime found in favelas?	PPU Pacifying \police Units					
33		and opportunities of growth in	d opportunities of growth in	of growth in	The government is using education to reduce youth unemployment in favelas by introducing practical skills based courses and offering free child care got teenage parents so they can return to education. What is the name of this program?	Schools of tomorrow program		
34					of growth in	of growth in	Waste is a big problem in Rio. This is especially difficult in favelas as many are built on steep slopes and have few roads so waste is difficult to collect and is therefore dumped polluting water ways and causing disease. What type of challenge is this	Environmental challenge
35							of	of
36				Site and service scheme is where a local authority provides land and services for residents to build homes to improve the lives of those who live in favelas. Give an example of this in Rio.	Favela Bairro Project			
37				In Rocinha the local authorities provided residents with building materials so that they could improve the quality of their homes and built basic services such as water pumps. What was this scheme called?	Self- help scheme			
38				The arrival of the Olympics led to many favelas being demolished to make way for new developments for the games. How many people lost their homes?	About 1000 people lost homes to a new road, estimated that 77,000 people were evicted from their homes			
39	Case s	The town of Campo Grande was built in the west zone to house some of those who were evicted, 800 homes were built with running water and sanitation, but what were the problems with this town?	Nowhere for children to play, 90min drive from the city centre where most worked, no shops					
40		100% mortgages allowed people to own their homes, free return ticket for cable car allowed easy access to city, paved roads and homes with water and sanitation as well as health and education facilities were just some of the advantages of the Favela Bairro project benefiting favelas in the North Zone but give 2 disadvantages.	Residents lacked the skills to maintain property, not every favela benefited, rents rose affecting the poorest					
41		The contamination of the earth's atmosphere by harmful or poisonous substances	Atmospheric pollution					

42		Land that has been used, abandoned and now awaits reuse; often found in urban areas	Brownfield site
43		Abandoned buildings and wasteland, areas that have become very run down.	Dereliction
44		A scheme supported by the government to encourage new businesses and new jobs in areas where there were no pre-existing businesses	Enterprise zone
45		When a decaying area is modernised and improved, the cost of living there increases and the original inhabitants are forced out	Gentrification
46		The area of countryside around the edge of a city with strict planning controls to stop houses being built	Green belt
47		A plot of land, often in a rural or on the edge of an urban area that has not been built on before	Greenfield site
48		High-technology such as computer software and engineering manufacture	High-tech industry
49	Bristol	When people move from one area to another	Migration
50	1	The average number of people living in a place, per square kilometre	Population density
51	of Urban Change	Employment sector that includes jobs in hi-tech industries, research, information technology and the media	Quaternary sector
52	of Urk	Improving run down areas by improving the housing and the environment	Regeneration
53	ssnes o	A zone of transition between a built-up area and the countryside, where there is often competition for land use	Rural-urban fringe
54		The extent to which an individual (or an area) lacks services and adequate housing, income or employment	Social deprivation
55		The chances available to improve quality of life, i.e. Access to education, health care, etc.	Social opportunities
56		Employment sector that includes service industries, such as health care, offices, financial services and retailing	Tertiary sector
57		Industries such as coal mining, engineering and manufacturing	Traditional industries
58		Process of increasing and preserving open space in urban areas, i.e. Public parks and gardens	Urban greening
59		Reversing the urban decline by modernising or redeveloping, aiming to improve the local economy	Urban regeneration
60		Unplanned growth of urban areas into the surrounding rural areas	Urban sprawl
61	ol, UK	What makes Bristol and important national city in the UK?	2 universities, 2 major deep sea docks, one of the 10 core UK cities, 8 <sup>th</sup> most popular UK city to visit
62	Case Study - Bristol, UK	What make Bristol important internationally?	Located on the M4 corridor Airport & rail links easy access to Europe, 2 universities, global industries e.g aerospace, silicon chip manufacturer,
63	ŭ	Bristol is a growing city and migration accounts for a good proportion of this growth. Where have people come from?	Recently Spain and Poland, past- Somalia, India & Jamaica

64		One impact of international migration is cultural diversity. What is the name of the carnival that is held annually attracting 40,000 people and celebrates different cultures of Bristol?	St Pauls Carnival			
65		Give one disadvantage of migration to Bristol	Greater pressure on school resources, housing, employment and health services, conflict			
66		Both national and international migration has helped lower the average age of the city increasing demand for what?	Sport and leisure facilities, shopping facilities and housing			
67		The type of good imported through Bristol has changed significantly in recent years they now important around 700,000cars from Germany, Japan and Korea but what did they used to import?	Tobacco from the West Indies, Wine from Bordeaux			
68		Bristol has seen a move from traditional secondary industries to what types of industries?	Tertiary and quaternary industries			
69		Today Bristol is known for its Hi-tech global industries such as?	Aardman Animation, aerospace companies, 50 micro-electronic & silicon businesses			
70		The production and manufacturing of aircraft, as well as the electronic systems such as those for communications and navigation	Aerospace industry			
71		The New Cabot Circus Shopping Centre, contains a range of shops, cinema and a hotel as well as 250 apartments. How much was spent on this development?	£500million provides social opportunities and economic opportunities through creation of jobs			
72		How many visitors does the free 3-day annual Harbourside Festival attract?	300,000 spectators			
73	ol Challenges & Opportunities				What did the regeneration of the Harbourside involve?	Workshops & warehouses converted into bars, nightclubs, museum, art & science exhibition centres
74					Changes in Bristol's industries has created employment opportunities in a range of skilled high paying jobs. What type of opportunity could this be described as?	Economic opportunity
75		Bristol was the first UK city to be awarded the status of European Green Capital they aimed to increase jobs in low carbon industries from 9,000 to what and by when?	17,000 by 2030			
76		What scheme involved different forms of transport being linked together to make it easy to transfer from one to another encouraging greater use of public transport?	Integrated transport system			
77		Challenges &	⋖	⋖	90% of people in Bristol live within 350m of parkland/waterways. How many nature reserves and parks does Bristol have?	8 nature reserves, 300 parks & waterways
78						What percentage of the city is covered by trees?
79			Urban sprawl is an environmental challenge for Bristol but they have worked hard to ensure most housing is built on brownfield sites. Between 2006-2013 what percentage of new housing was built on greenfield land?	Only 6 %		
80	Bristol	Finzel Reach is an old sugar refinery and brewery buildings. This brownfield site that has been redeveloped into what?	Office space, shops and 400 apartments			
81		Bristol has successfully reduced its waste per head and is now 23% lower than the UK average. One way they achieved this was by increasing what they recycled. How much waste does Bristol now recycle?	50% of all waste is recycled			
82		How much waste goes to landfill?	Zero, what is not recycled or composted is burnt to recapture energy			
83		To reduce air pollution, Bristol has encouraged the use of electric cars by installing how many new charging points?	40 in public car parks			

84		They have also tried using buses that run off of bio-methane gas, one tank can do 186miles. What did they call this type of bus?	Poo Bus (one tank of gas uses the annual waste of about 5 people)
85		Filwood has a life expectancy of 78 (2 years lower than the average) 1/3 of people are unemployed and 62% of people say they feel unsafe going out at night. What zone of the city is Filwood?	Poor inner city area
86	ø	Stoke Bishop, an area were only 3% are unemployed, 81% of homes are owner-occupied,94% of students get 5 or more GCSEs and the life expectancy is 83years. What zone of the city is this located?	Wealthy suburbs
87	Bristol Challenges & Opportunities	Why are students getting higher GCSE grades in the wealthier suburbs?	More money for extra tuition, revision guides etc, better support from parents, private schools
88	Bristol Opp	Brunel Engine Shed was part of the Temple Mead regeneration scheme but what did this listed historic building turn in to?	£1.7m innovation centre, high- tech, creative and low carbon companies
89		The Temple Mead regeneration scheme hoped to create how many jobs by 2037?	17,000
90		A city organised so as to create; minimal damage to the environment, a sound economic base, a fair allocation of resources, secure jobs, a strong sense of community and with local people involved in decision making	Urban sustainability
91		Ensuring that people are provided with employment	Economic planning
92		Ensuring that resources are not wasted and the environment is protected for future generations	Environmental planning
93		Roofs of buildings covered by vegetation that are often used to harvest rainwater	Green roofs
94	cities	An unbuilt area that provides a natural and free recreational space, as well as a habitat for wildlife	Green space
95	Sustainable cities	A Strategy where different forms of transport are linked together to make it easy to transfer from one to another	Integrated Transport System (ITS)
96	Sus	A resource that cannot be exhausted, i.e. Wind, solar and tidal energy	Renewable energy sources
97		Ensuring that people's social needs are met, such as affordable housing	Social planning
98		Sun's energy exploited by solar panels, collectors or cells to heat water or air or to generate electricity	Solar energy
99		Energy that can potentially be used well into the future without harming future generations	Sustainable energy supply
100		Meeting the present-day need for safe, reliable and affordable water without reducing supply for future generations	Sustainable water supply

	Y11 PAPER 2 SECTION B - THE CHANGING ECONOMIC WORLD					
1		Employment sector that includes farming, mining and other related activities	Primary sector			
2		Employment sector that involves manufacturing	Secondary sector			
3		Employment sector that includes service industries, such as health care, offices, financial services and retailing	Tertiary sector			
4		Employment sector that includes jobs in high-tech industries, research, information technology and the media	Quaternary sector			
5	ion	The decline of a country's traditional manufacturing industry due to exhaustion of raw materials, loss of markets and overseas competition	De-industrialisation			
	Deindustrialisation	Process creating a more connected world, with increases in the global movements of goods (trade) and people (migration & tourism)	Globalisation			
6	Jeindus	The shift of some HIC economies from producing goods (secondary industry) to providing services (tertiary & quaternary industries)	Post-industrial economy			
7		Computers, internet, mobile phone and satellite technologies can be grouped under what heading?	Information technology			
8		A collection of businesses located on the same site	Business Park			
9		A collection of scientific and technical knowledge-based businesses located on a single site	Science Park			
10		What are the advantages of the site for the Cambridge science park?	Excellent transport links (M11 &rail & airport) Cheaper land on the edge of the city major university			
11	ural areas	Rural decline in the Outer Hebrides is causing many problems for the area such as the ageing population and the increasing isolation as smaller populations mean it is a struggle to support local bus services. Give another problem of decline.	Young skilled people move away struggle to maintain services, fewer children make schools more difficult to maintain,			
12	Changing R	South Cambridgeshire has since significant growth over the years 80% car ownership has increased traffic on the rural roads as people commute into the city. Give an economic problem of rural growth	Lack of affordable homes, high petrol prices			
13	0	The management of money within the service sector, including banking, insurance, securities dealing, and fund management	Financial services			
14		The transport of goods in bulk by lorries, train, ship or aircraft	Freight			
15	as	as	as	as	Industries that involve the extraction of raw materials, such as mining and quarrying	Extraction industries
16	Rural are	How much does Torr Quarry in Somerset contribute to the local economy?	£15million each year			
17	Changing Rural areas	Torr Quarry employs 100 people tries to be environmentally sustainable. Give two ways it minimises its impact on the environment	Quarries are restored to wildlife lakes, use of railway reduces pressure on roads, vibrations/dust are monitored carefully, trees and vegetation planted			

18		Economic and cultural differences between southern England and the rest of the UK	North-south divide
19		A scheme supported by the government to encourage new businesses and new jobs in areas where there were no pre-existing businesses	Enterprise zones
20		How many enterprise Zones have been created since 2011?	24
21		How does the government support Enterprise Zones?	Discounted business rates, provides superfast broad band, simple planning regulations
22		Voluntary partnerships between local authorities and businesses that aim to identify the business needs in the local areas and encourage companies to invest	Local enterprise partnerships (LEPS)
23	onomy	How many LEPs are there in the England?	39
24	mproving the UK economy	The Lancashire LEP aimed to promote new business in an area suffering from deindustrialisation and aimed to create how many jobs?	50,000 new jobs by 2023
25	oving th	The commonwealth is a voluntary association of 53 independent and equal sovereign states, most being former British colonies	Commonwealth
26	mpr	A politico-economic union of a number of European countries	European union (eu)
27	_	Countries which have grouped together to increase trade between them by cutting tariffs to discourage trade with non-members	Trading group
28		The basic equipment and structures (such as roads, utilities, water supply and sewage) that are needed for a country or region to function properly	Infrastructure
29		Liverpool2 is a new container terminal at the Port of Liverpool, costing £300million but the project will more than double the ports capacity. What advantages would this bring Liverpool and the UK economy	Create thousands of jobs, reduce freight traffic, increase UK trade
30		New runway at Heathrow, would create many jobs in the construction phase and after it is completed and increase imports& exports, the airport already employs 76,000people and supports many local businesses. But what concerns did people have nearby?	Increased noise from planes, reducing house prices along the flight path.

	PAPER 2 HUMAN GEOGRAPHY: SECTION B - THE CHANGING ECONOMIC WORLD				
1		When a country or non-governmental organization (NGO) donates resources to another country to help it develop or improve people's lives	Aid		
2		The number of births a year per 1000 of the total population	Birth rate		
3		The number of deaths in a year per 1000 of the total population	Death rate		
4		Cancellation of debts to a country by a global organisation such as the World Bank	Debt relief		
5		The proportion of people below (aged 0-14) and above (over 65) normal working age	Dependency ratio		
6		The progress of a country in terms of economic growth, the use of technology and human welfare	Development		
7		Difference in standards of living and wellbeing between the world's richest and poorest countries	Development gap		
8		A person who is forced to move from home but stays in his/her country of origin	Displaced person		
9	dı	A person who moves voluntarily to seek a better life, such as a better-paid job or benefits like education and health care	Economic migrant		
10	nt Ga	Nature tourism usually involving small groups with minimal impact on the environment	Ecotourism		
11	Development Gap	The migration of people out of a country	Emigration		
12	De	Producers in LICs given a better price for their goods such as cocoa, coffee and cotton	Fairtrade		
13		When countries do not use tariffs or quotas to restrict trade	Free trade		
14		Measurement of economic activity calculated by dividing the gross (total) national income by the size of the population	Gross National Income (GNI)		
15		The 38 countries with the largest amount of debt	Highly-Indebted Poor Country (HIPC)		
16		A method of measuring development where GDP per capita, life expectancy and adult literacy are combined to give an overview	Human Development Index (HDI)		
17		A person who moves into a country	Immigrant		
18		The migration of people in to a country	Immigration		
19		The number of babies that die under a year of age, per 1000 live births	Infant mortality rate		
20		Simple, easily learned and maintained technology used in LICs for a range of economic activities	Intermediate technology		
21		The action or process of putting in money, usually for profit	Investment		
22		The average number of years a person is expected to live.	Life expectancy		
23		A sum of money borrowed to be paid back on agreed terms	Loan		
24	Gap	A life-threatening disease caused by parasites transmitted to people by infected mosquitoes	Malaria		
25	nent	Very small loans which are given to people in the LICs to help them start a small business	Microfinance loans		
26	Development	When people move from one area to another; in many LICS people move from rural to urban areas (rural–urban migration)	Migration		
27	Ď	A series of consequences where one development makes another one possible, such as an increase in money available	Multiplier effect		
28		The gap between birth rate and death rate	Natural population change		
29		An organisation which is not part of a government, but provides important resources	Non-Governmental Organisation (NGO)		

30		A graph showing the age and sex of a population	Population pyramid
31		The number of each sex in each age group, usually displayed in a population pyramid diagram	Population structure
32		Unprocessed raw materials extracted from the earth or agricultural products	Primary products
33		How good a person's life measured by such things of housing and environment, access to education, healthcare, how secure people feel and how happy they are with their lifestyle	Quality of life
34		Limits on the quantity of goods that can be imported	Quota
35		A person forced to move from his/her country of origin as a result of civil war or a natural disaster such as an earthquake	Refugee
36		Taxes or customs dues paid on imports	Tariff
37		The commercial organisation of attracting non-resident people to areas of interest	Tourism
38		Buying and selling of goods and services between countries	Trade
39		Countries which have grouped together to increase trade between them by cutting tariffs to discourage trade with non-members	Trading group
40		An organisation of 54 countries formed to encourage co-operation between African nations	African Union
41		Trading group of West and Central African countries bordering the Sahara Desert	CEN-SAD (Community of Sahel-Saharan States)
42		Growing crops or raising livestock for profit, often involving vast areas of land	Commercial farming
43		A voluntary association of 53 independent and equal sovereign states, most being former British colonies	Commonwealth
44		Long-term support given by charities, governments and multi-lateral organisations, which aims to improve quality of life	Developmental aid
45	dε	Short-term aid that takes the form of food, water, medical supplies and shelter	Emergency aid
46	nt G	The total value of goods and services produced by a country in a year	Gross Domestic Product (GDP)
47	_	A method of measuring development where GDP per capita, life expectancy and adult literacy are combined to give an overview	Human Development Index (HDI)
48	Deve	Relative proportion of the workforce employed in different sectors of the economy	Employment structure
49		Money, goods and services given by single governments or an organisation like the World Bank or IMF to help the quality of life and economy of another country	International aid
50		The average number of years a person is expected to live	Life expectancy
51		countries that have begun to experience high rates of economic development, usually along with rapid industrialisation	Newly-Emerging Economies (NEE)
52		the accidental leakage of oil from rigs or refineries into the surrounding area, resulting in severe environmental damage and pollution	Oil spills
53	, NEE	aims to stabilise the price of oil and ensure a regular supply	OPEC (Organisation of Petroleum Exporting Countries)
54	Nigeria,	unprocessed raw materials extracted from the earth or agricultural products	Primary products
55	N Si Si	employment sector that includes farming, mining and other related activities	Primary sector
56		how good a person's life is as measured by such things as quality of housing and environment, access to education, health care, security and levels of happiness	Quality of life
57		employment sector that involves manufacturing	Secondary sector

58		employment sector that includes service industries, such as health care, offices, financial services and retailing	Tertiary sector
59		a company that has operations (factories, offices, research and development, shops) in more than one country	Transnational corporation (TNC)
60	Nigeria, NEE	Nigeria is home to about 40 TNCs. Name the two largest and most important?	Shell Oil & Unilever
61		Shell has brought many benefits to Nigeria, it is one of the largest employers, how many direct and indirect jobs has it created?	Direct 65,000 Indirect 250,000
62		What percentage of aid given to Africa goes to Nigeria?	4%
63		Aid from the UK and USA has been used to educate people about what?	HIV/AIDs and how to reduce the spread
64		The NGO Nets for life provided education on malaria prevention. What do they distribute to households?	Anti-mosquito nets
65		Action Aid and funds from the World Bank helped provide what, to the community of Aduwan in Kaduna State?	Health Clinic

PAPER 2 HUMAN GEOGRAPHY: SECTION C - THE CHALLENGE OF RESOURCE MANAGEMENT						
1		Intensive farming aimed at maximizing the amount of food produced	Agribusiness			
2		Measurement of the greenhouse gases individuals produce, through burning fossil fuels	Carbon footprint			
3		Reducing energy consumption by using less energy and existing sources more efficiently	Energy conservation			
4		The range of energy sources of a region or country, both renewable and non-renewable	Energy mix			
5		Uninterrupted availability of energy sources at an affordable price	Energy security			
6	Energy, Water, Food	The distance covered supplying food to consumers	Food miles			
7		A natural fuel such as coal or gas, formed in the geological past from the remains of living organisms $ \\$	Fossil fuels			
8		The process of extracting gas from gas shale where fluids at high pressure are injected to fracture the shale rock, allowing the gas to escape	Fracking			
9	y, Wė	Recycled domestic wastewater	Grey water			
10	nerg	Goods and services bought by residents of a country from another country	Import			
11	- 1	Food produced without the use of chemicals such as fertilisers and pesticides	Organic produce			
12	urce	A resource that cannot be exhausted, e.g. Wind, solar and tidal energy	Renewable energy			
13	Resources	A food intake below that needed to sustain a healthy life	Undernourishment			
14	UK	When people do not eat enough nutrients to cover their needs for energy and growth, or to maintain a healthy immune system	Undernutrition			
15		When demand for water is greater than supply	Water deficit			
16		Measured in terms of the chemical, physical and biological content of the water	Water quality			
17		When the demand for water exceeds supply in a certain period, or when poor quality restricts its use	Water stress			
18		When the supply of water is greater than demand for water	Water surplus			
19		Matching supply with demand by moving water from an area with water surplus to another area with water deficit	Water transfer			
20		Without reliable access to enough affordable, nutritious food	Food insecurity			
21		Access to sufficient, safe, nutritious food to maintain a healthy and active life	Food security			
22		Widespread shortage of food often accompanied by malnutrition, starvation and increased mortality	Famine			
23		Where the demand for food exceeds the supply of supply	Food deficit			
24		Where the supply of food exceeds the demand for food	Food surplus			
25	ent	Social unrest in response to increases in the price of food	Food riots			
26	Food Management	Climate change is affecting farming patterns across the world why?	Affects rainfall patterns, increased temperatures allow pest to spread and survive			
27	Food	How does conflict lead to food insecurity?	Crops and farms are destroyed			
28		Artificial application of water to the land or soil, to supply crops and other plants	Irrigation			
29		What type of irrigation is most effective?	Drip irrigation, less water is lost			
30		Feeding too many livestock for too long on the land, so it is unable to recover its vegetation	Overgrazing			

31		A type of biotechnology that alters the DNA of crops in order to produce higher yields, use fewer chemicals and reduce carbon dioxide emissions	Genetically modified crops (GM)
32		An increase in crop production, especially in poorer countries, using high-yielding varieties (mainly cereal crops), artificial fertilisers and pesticides	Green revolution
33		Growing plants in water using nutrient solutions, without soil	Hydroponics
34		The removal of top soil by wind and rain.	Soil erosion
35		Food production and distribution that is local, rather than national and/or international	Local food sourcing
36		Food produced without the use of chemicals such as fertilisers and pesticides	Organic farming
37		Food (often produced locally) that is 'in season', such as strawberries in the summer and apples in the autumn	Seasonal produce
38		(Formed from 'permanent agriculture' and 'permanent culture') a system of food production which follows the patterns and features of natural ecosystems	Permaculture
39		Actions that meet the needs of the present without reducing the ability of future generations to meet their needs	Sustainable
40	Food Management	Fishing that avoids damaging supplies by setting catch limits and monitoring fish breeding and fishing practices	Sustainable fishing
41		Food production that avoids damaging natural resources, providing good quality produce as well as social and economic benefits to local communities	Sustainable food supply
42		Growing food and raising animals in towns and cities, as well as processing and distributing food, and collecting and re-using food waste	Urban farming
43		The Indus Basin Irrigation System (IBIS) is an important water source for which two countries?	India and Pakistan
44	Food	The IBIS has allowed over 14million hectares of land to be irrigated. How much has this increased the crop yields for rice, wheat and fruit?	Rice increased by 39% Wheat increased by 36% Fruit increased by 150%
45		One problem caused by the irrigation scheme is salinisation. What does this mean?	When salt is drawn to the surface through evaporation damages the soil



## Knowledge Organiser **Geography**

GCSE Geography AQA